

ABSTRACT OF THE DISCLOSURE

Methods for automated uniformity assessment and modification of image non-uniformities using an image measurement device capable of determining image reflectance and/or transmittance as a function of position, such as a spectrophotometer, a colorimeter, and/or a densitometer. One or more of these devices scan an image on a substrate, such as a sheet, thereby generating data representing image characteristics, such as, for example, image non-uniformity. The sheet may contain a reference/test pattern including one column, strip or patch intended to have a uniform density. This data generated by the device after the scan of the substrate is analyzed with signal processing algorithms for image characteristics assessment, including image spatial uniformity and compared to reference image characteristics including image spatial uniformity. An image modification profile may be generated to be applied to a marking system to thereby alter subsequent image data and improve image spatial uniformity of the marking system.